

## Results of Medical Record Survey

Peoplechart and SeniorNet conducted a survey to better understand the attitudes of SeniorNet members about their medical records. The survey results helped shape the development of a Medical Record Center to benefit SeniorNet members. It also helped Peoplechart to better understand the uses for medical records from the perspective of this population segment.

### Survey Highlights

#### **Methodology**

453 individuals responded to our survey. They became aware of survey from the Research section of SeniorNet's website and from the email newsletter sent to SeniorNet's members on a monthly basis. Survey ran from October through December 2002.

General demographics of SeniorNet respondents:

- 90% over 60 years old with average age at 70
- two-thirds are female
- located throughout the U.S.
- average income of \$40K
- 100% computer users (as this was an online survey)

#### **Findings**

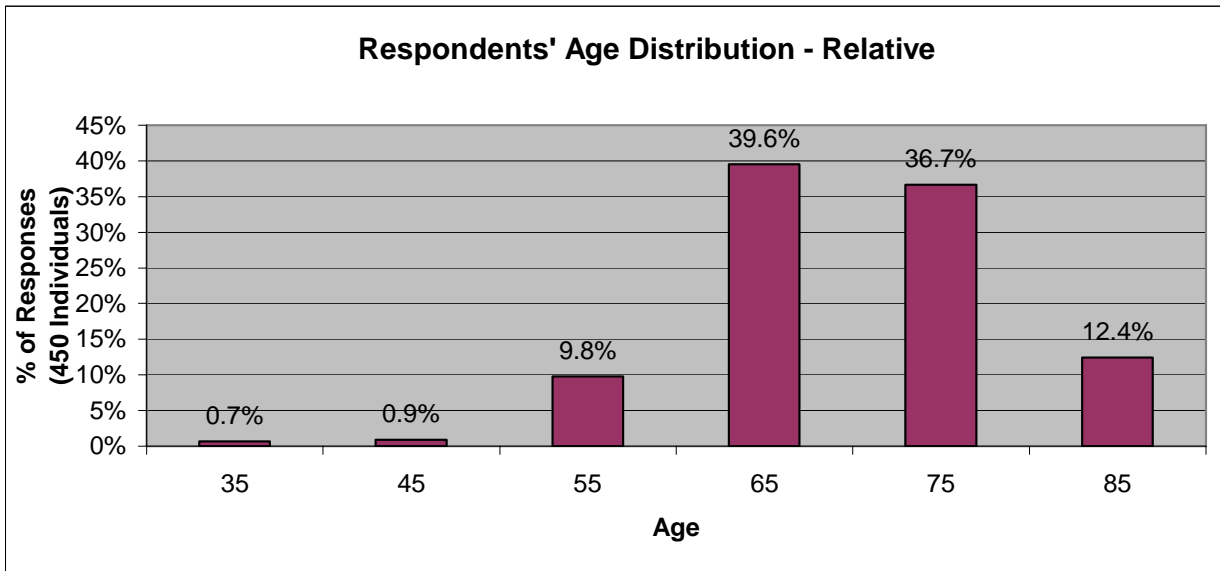
- Today, respondents are actively receiving treatments from an average of 3 doctors. Over a quarter (27%) are being treated by 4 or more doctors. In their past, respondents have seen an average of 8 doctors, with 3 out of 10 respondents (31%) being treated by 10 or more doctors historically.
- Despite having seen an average of 8 different doctors in the past, almost two-third (66%) of respondents believe that their total medical records from current and past providers amount to 100 pages or less. 3 out of 10 (30%) respondents believe that their total records contain 200 pages or more.
- 4 out of 10 (43%) respondents do not have any copies of their medical records. An additional 22% have 10 pages or less.
- 2 out of 10 (22%) respondents have had a medical emergency while traveling.
- Respondents cited these top uses for medical records when asked to rank them from 1 (most important) to 8 (least important):
  - #1: Preventing medical errors
  - #2: Avoiding loss of irreplaceable information
  - #3: Reducing duplicate/unnecessary tests
  - Ensuring privacy and security came surprisingly lower in importance (#5), behind availability when traveling (#4). Keeping records for family members to benefit came in #6. The least important was saving time when changing providers.
- 3 out of 4 (76%) respondents saw a need for a service that would help them collect and maintain their medical information, and make it available when needed.

**Observations**

**Demographics**

1. How old will you be on your next birthday?

Nearly 90% of SeniorNet respondents are over 60 years old. The average age is 70.



Age Distribution						
Age	Avg Age	Total	% w/ Blank	% w/o Blank	Cumulative	Wghtd Avg
Under 40	35	3	0.7%	<b>0.7%</b>	0.7%	0
40-49	45	4	0.9%	<b>0.9%</b>	1.6%	0
50-59	55	44	9.7%	<b>9.8%</b>	11.3%	5
60-69	65	178	39.3%	<b>39.6%</b>	50.9%	26
70-79	75	165	36.4%	<b>36.7%</b>	87.6%	28
80 and Over	85	56	12.4%	<b>12.4%</b>	100.0%	11
Blank		3	0.7%			
<b>Grand Total</b>		<b>453</b>	<b>100.0%</b>	<b>100.0%</b>		<b>70</b>

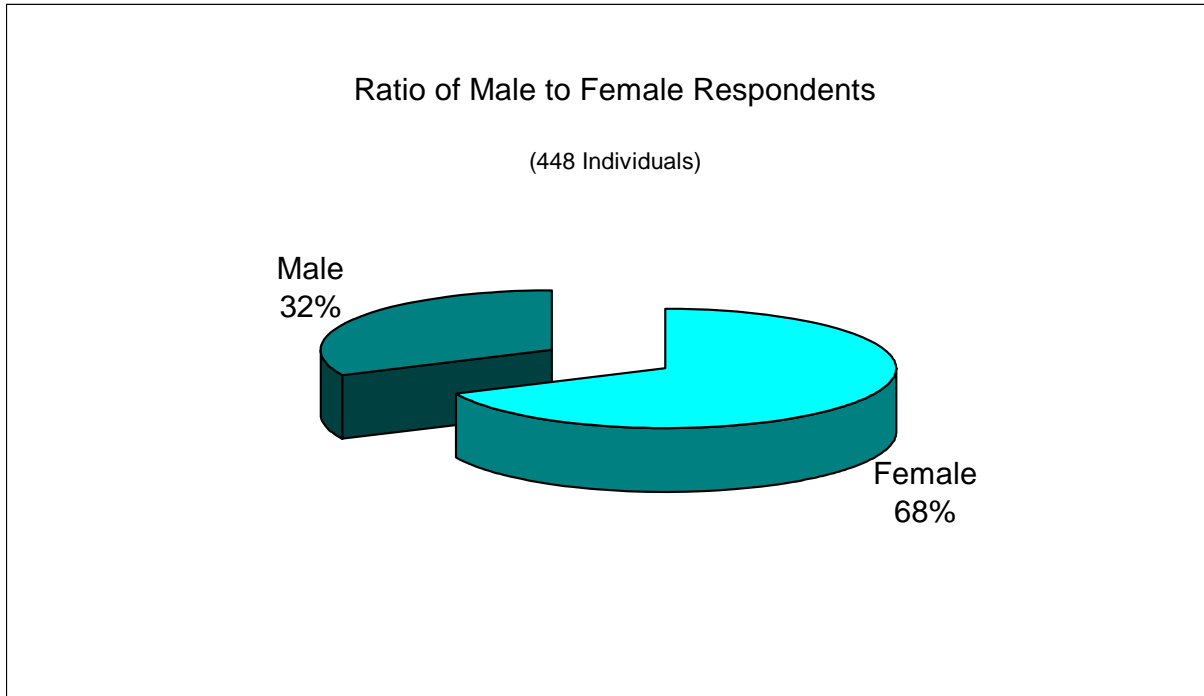
Note: *Blank* refers to the number of survey takers who did not respond to this question.

**Observations**

**Demographics**

2. Are you male or female?

Two-thirds of respondents are female.



Male/Female Respondent Ratio			
Gender	Total	% w/ Blank	% w/o Blank
Female	305	67.3%	68.1%
Male	143	31.6%	31.9%
Blank	5	1.1%	
Grand Total	453	100.0%	100.0%

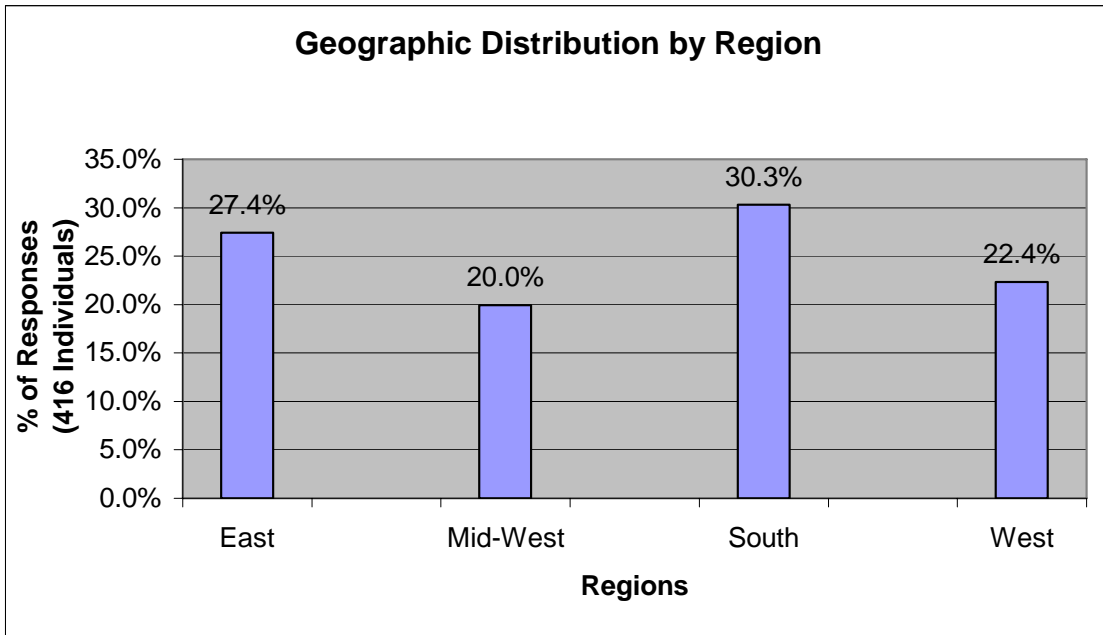
Note: *Blank* refers to the number of survey takers who did not respond to this question.

**Observations**

**Demographics**

3. If you are a U.S. resident, please enter the 2 letter code for the state where you live.

The SeniorNet respondents live in places widely dispersed throughout the United States, with distribution that resembles much of the population today. Nearly 420 respondents reside in 45 different states, with the largest concentration in California (13%). When we group states into region, the two largest regions are South (30%) and East (27%).



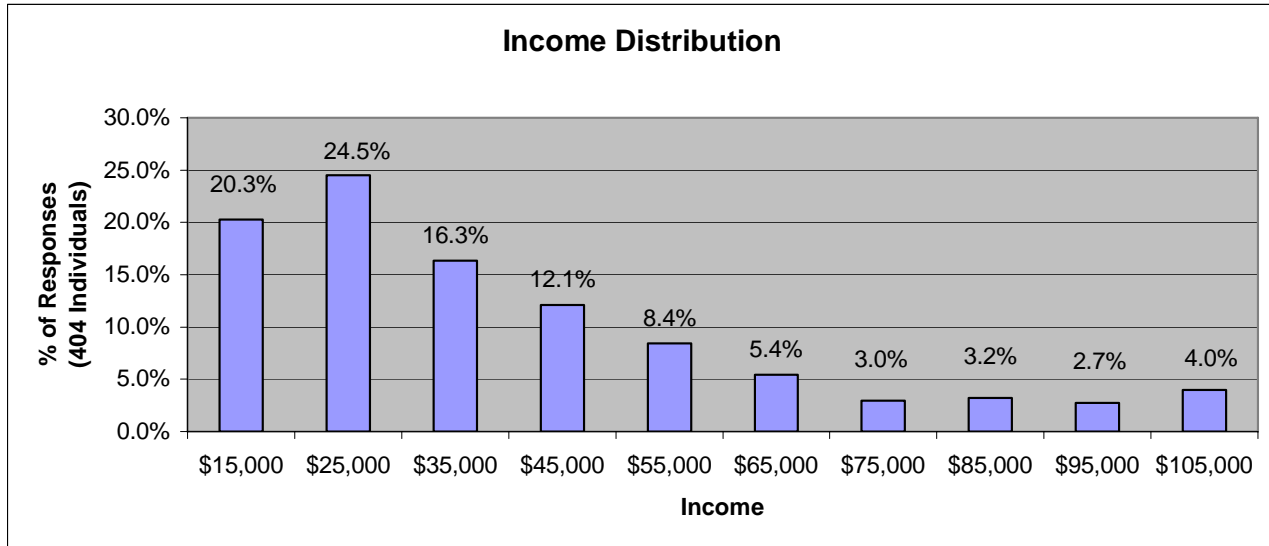
Geographic Distribution by Region									
East		Mid-West		South		West		Total	
CT	1.7%	ID	0.2%	AL	0.5%	AK	0.5%		
DE	0.5%	IL	4.3%	AR	1.9%	AZ	2.4%		
MA	3.1%	IN	1.4%	FL	9.1%	CA	12.5%		
MD	2.2%	KS	1.2%	GA	3.6%	CO	0.7%		
ME	0.5%	MI	1.7%	KY	0.7%	HI	0.2%		
NH	0.5%	MN	0.7%	MS	1.0%	NM	0.7%		
NJ	4.1%	MO	1.0%	NC	2.9%	NV	0.7%		
NY	8.7%	MT	0.5%	SC	1.2%	OR	1.0%		
PA	5.5%	NE	1.4%	TN	1.4%	WA	3.6%		
RI	0.2%	OH	4.3%	TX	5.0%				
WV	0.5%	OK	1.2%	VA	2.9%				
		SD	0.5%						
		WI	1.2%						
		WY	0.2%						
27.4%		20.0%		30.3%		22.4%		100.0%	

**Observations**

**Demographics**

4. Please give the range closest to your annual household income.

The average income is at \$40K with 18% of respondents receiving \$65K or more per year.



Income Distribution						
Income	Avg Income	Total	% w/ Blank	% w/o Blank	Cumulative	Wghtd Avg
Under \$20,000	\$15,000	82	18.1%	20.3%	20.3%	\$3,045
\$20-30,000	\$25,000	99	21.9%	24.5%	44.8%	\$6,126
\$30-40,000	\$35,000	66	14.6%	16.3%	61.1%	\$5,718
\$40-50,000	\$45,000	49	10.8%	12.1%	73.3%	\$5,458
\$50-60,000	\$55,000	34	7.5%	8.4%	81.7%	\$4,629
\$60-70,000	\$65,000	22	4.9%	5.4%	87.1%	\$3,540
\$70-80,000	\$75,000	12	2.6%	3.0%	90.1%	\$2,228
\$80-90,000	\$85,000	13	2.9%	3.2%	93.3%	\$2,735
\$90-100,000	\$95,000	11	2.4%	2.7%	96.0%	\$2,587
over \$100,000	\$105,000	16	3.5%	4.0%	100.0%	\$4,158
Blank		49	10.8%			
<b>Grand Total</b>		<b>453</b>	<b>100.0%</b>	<b>100.0%</b>		<b>\$40,223</b>

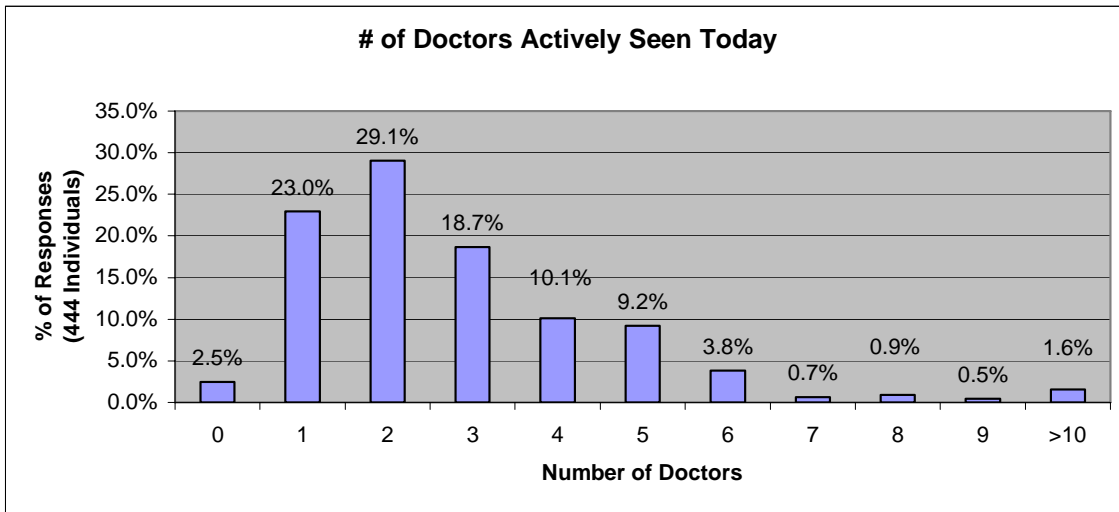
Note: *Blank* refers to the number of survey takers who did not respond to this question.

**Observations**

**Health Care Statistics**

5. Enter the number of different doctors you actively see today. Include primary care and specialists such as cardiologists and surgeons.

Respondents actively see an average of 3 doctors today. About 1 in 4 respondents (27%) see 4 or more doctors.



Number of Doctors Actively Seen Today				
# Docs Today	Total	% w/ Blank	% w/o Blank	Wghtd Avg
0	11	2.4%	2.5%	0.00
1	102	22.6%	23.0%	0.23
2	129	28.5%	29.1%	0.58
3	83	18.4%	18.7%	0.56
4	45	10.0%	10.1%	0.41
5	41	9.1%	9.2%	0.46
6	17	3.8%	3.8%	0.23
7	3	0.7%	0.7%	0.05
8	4	0.9%	0.9%	0.07
9	2	0.4%	0.5%	0.04
11	2	0.4%	0.5%	0.05
12	1	0.2%	0.2%	0.03
26	1	0.2%	0.2%	0.06
32	1	0.2%	0.2%	0.07
42	1	0.2%	0.2%	0.09
43	1	0.2%	0.2%	0.10
Blank	8	1.8%		
<b>Grand Total</b>	<b>452</b>	<b>100.0%</b>	<b>100.0%</b>	<b>3.0</b>

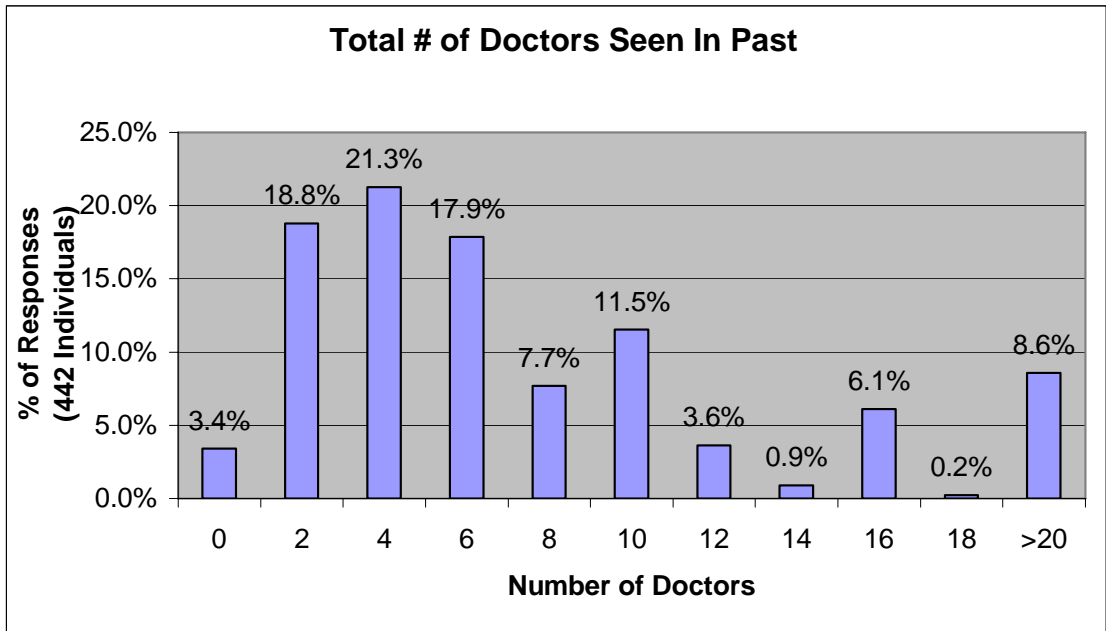
Note: *Blank* refers to the number of survey takers who did not respond to this question.

**Observations**

**Health Care Statistics**

6. Please estimate the total number of different doctors whom you have seen in the past and no longer see today. Include primary care and specialists.

Respondents estimate that they have received care from an average of 8 different doctors in the past, with 31% having received treatment from 10 or more doctors.



Total Number of Doctors Seen in Past				
# Docs Past	Total	% w/ Blank	% w/o Blank	Wgt Avg
0	15	3.3%	3.4%	0.00
1	27	6.0%	6.1%	0.06
2	56	12.4%	12.7%	0.25
3	47	10.4%	10.6%	0.32
4	47	10.4%	10.6%	0.43
5	38	8.4%	8.6%	0.43
6	41	9.1%	9.3%	0.56
7	13	2.9%	2.9%	0.21
8	21	4.6%	4.8%	0.38
9	3	0.7%	0.7%	0.06
10	48	10.6%	10.9%	1.09
11	2	0.4%	0.5%	0.05
12	14	3.1%	3.2%	0.38
13	2	0.4%	0.5%	0.06
14	2	0.4%	0.5%	0.06
15	27	6.0%	6.1%	0.92
17	1	0.2%	0.2%	0.04
20	17	3.8%	3.8%	0.77
22	1	0.2%	0.2%	0.05
25	7	1.5%	1.6%	0.40
30	7	1.5%	1.6%	0.48
40	1	0.2%	0.2%	0.09
50	3	0.7%	0.7%	0.34
100	2	0.4%	0.5%	0.45
Blank	11	2.4%		
Grand Total	453	100.0%	100.0%	8

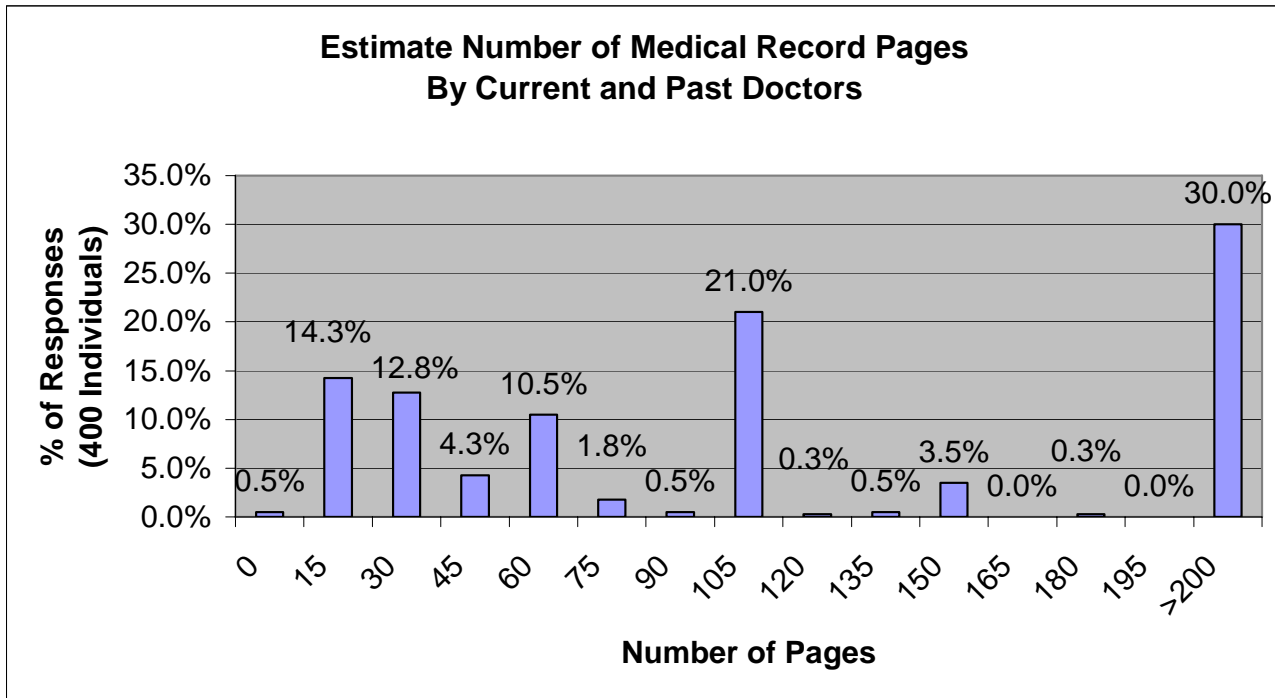
Note: *Blank* refers to the number of survey takers who did not respond to this question.

**Observations**

**Health Care Statistics**

7. Please make a guess at the total number of medical record pages kept in files of your various doctors past and present.

66% of respondents believe that their total medical records from current and past providers amount to 100 pages or less. However, 30% of respondents believe that their total records contain 200 pages or more.



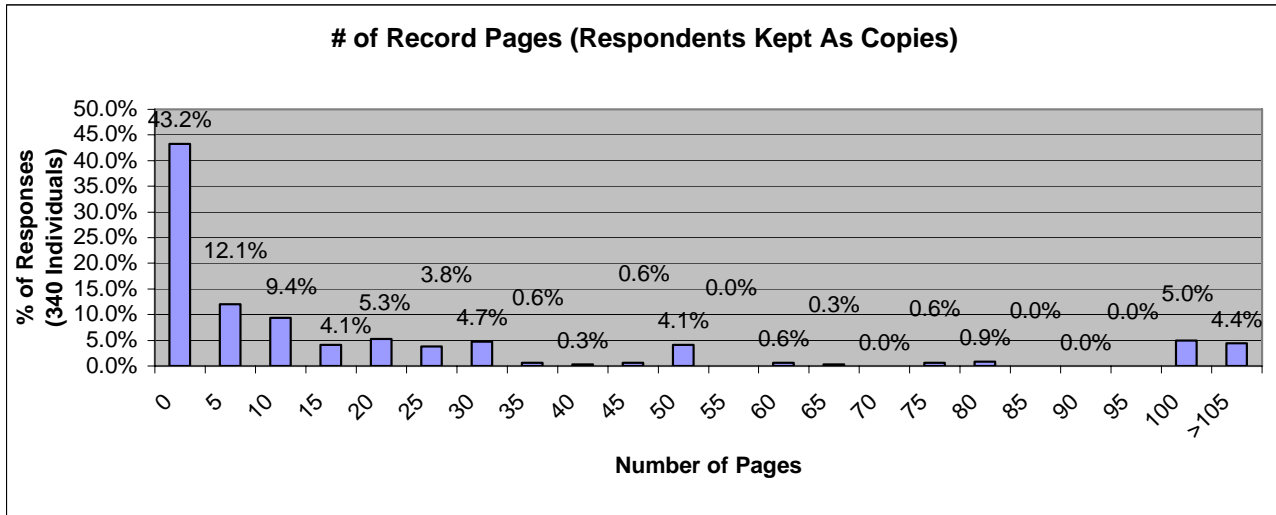
Estimate # of Record Pages (All Doctors)		
# Pages	Distribution	Cumulative Distribution
0	0.5%	0.5%
15	14.3%	14.8%
30	12.8%	27.5%
45	4.3%	31.8%
60	10.5%	42.3%
75	1.8%	44.0%
90	0.5%	44.5%
105	21.0%	65.5%
120	0.3%	65.8%
135	0.5%	66.3%
150	3.5%	69.8%
165	0.0%	69.8%
180	0.3%	70.0%
195	0.0%	70.0%
>200	30.0%	100.0%

## Observations

### Health Care Statistics

8. If you do keep copies of your records, how many pages do you have at hand?

43% of respondents do not have any copies of their medical records. Another 22% have 10 pages or less. About (25%) of respondents (111 individuals) did not respond to the question. Respondents on average have about 25 pages of their medical records at hand.



Number of Record Pages Patient Has Copies				
# Pages	# Respondents	% w/ Blank	% w/o Blank	Wgtd Avg
0	147	32.6%	43.2%	0.00
1	8	1.8%	2.4%	0.02
2	11	2.4%	3.2%	0.06
3	5	1.1%	1.5%	0.04
4	6	1.3%	1.8%	0.07
5	11	2.4%	3.2%	0.16
6	3	0.7%	0.9%	0.05
7	1	0.2%	0.3%	0.02
8	3	0.7%	0.9%	0.07
9	1	0.2%	0.3%	0.03
10	24	5.3%	7.1%	0.71
12	4	0.9%	1.2%	0.14
15	10	2.2%	2.9%	0.44
20	18	4.0%	5.3%	1.06
21	1	0.2%	0.3%	0.06
25	12	2.7%	3.5%	0.88
30	16	3.5%	4.7%	1.41
35	2	0.4%	0.6%	0.21
40	1	0.2%	0.3%	0.12
45	2	0.4%	0.6%	0.26
50	14	3.1%	4.1%	2.06
60	2	0.4%	0.6%	0.35
63	1	0.2%	0.3%	0.19
75	2	0.4%	0.6%	0.44
80	3	0.7%	0.9%	0.71
99	1	0.2%	0.3%	0.29
100	16	3.5%	4.7%	4.71
120	1	0.2%	0.3%	0.35
135	1	0.2%	0.3%	0.40
150	2	0.4%	0.6%	0.88
200	3	0.7%	0.9%	1.76
221	1	0.2%	0.3%	0.65
250	2	0.4%	0.6%	1.47
300	4	0.9%	1.2%	3.53
350	1	0.2%	0.3%	1.03
Blank	111	24.6%		
Grand Total	451	100.0%	100.0%	24.6

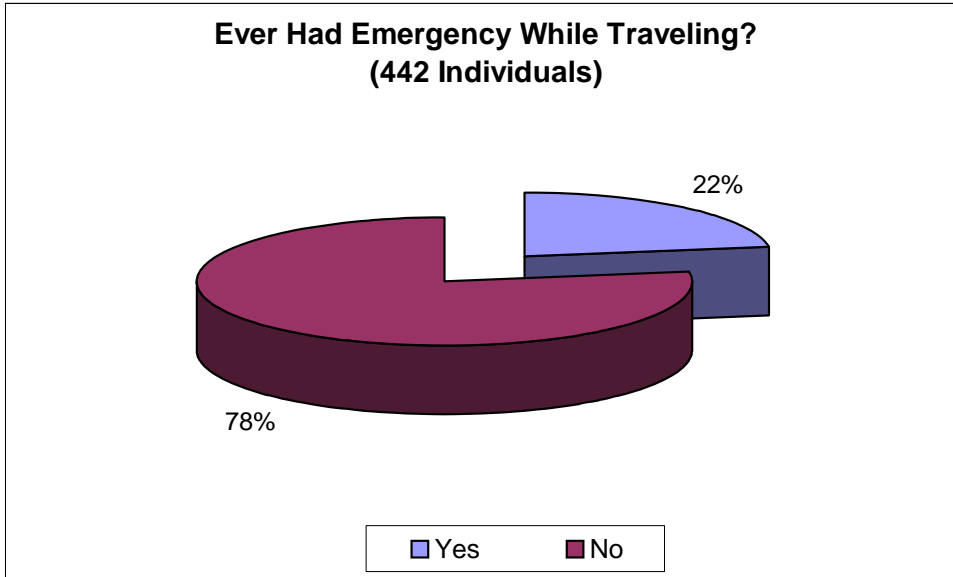
Note: *Blank* refers to the number of survey takers who did not respond to this question.

**Observations**

**Health Care Statistics**

9. Have you ever had a medical emergency while traveling? (Yes/No)

Nearly a quarter (22%) of respondents experienced a medical emergency while traveling.



Ever Had Emergency While Traveling?			
Answer	Total	% w/ Blank	% w/o Blank
Yes	99	21.9%	<b>22.4%</b>
No	343	75.7%	77.6%
Blank	11	2.4%	
Grand Total	453	100.0%	100.0%

Note: *Blank* refers to the number of survey takers who did not respond to this question.

## Observations

### Attitudes Towards Medical Records

#### (Agree or Disagree)

10. I am pretty sure that *one* of my doctors must have a complete and up-to-date copy of all my important medical records.

About 68% of respondents agree that *one* of their doctors has up-to-date copies.

11. My medical records are important to guide my doctors in coordinating my care.

Over 96% agree that their medical records are important guide for their doctors in coordinating care.

12. Medical records are important in avoiding the cost, discomfort, and inconvenience of unnecessary or duplicate medical tests.

Over 97% agree that medical records are important in avoiding unnecessary or duplicate medical tests.

13. Medical records can help reduce preventable medical errors.

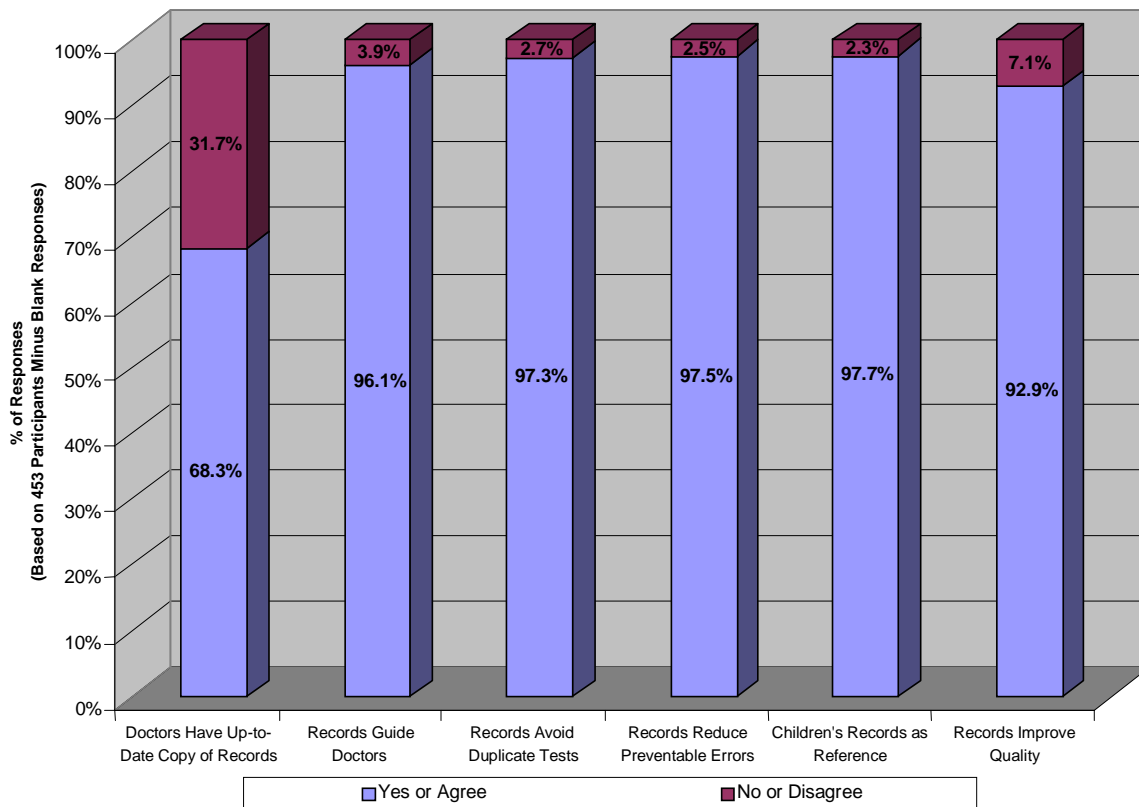
About 98% agree that medical records can help reduce preventable medical errors.

14. It is important to ensure children's medical records are kept for future reference.

Almost 98% agree that it's important for children's records to be kept for future reference.

15. In an emergency, the quality of my medical care would be improved if my medical records were available.

93% agree that the quality of care would be improved if medical records were available in an emergency.



## Observations

### **Attitudes Towards Medical Records (\*)**

16. The top uses for medical records based on results provided by 209 respondents who successfully ranked all eight choices including "other" by their order of importance (with 1 = most important and 8 = least important) (\*\*):

- (#1) Prevent medical errors that could be avoided.
- (#2) Avoid loss of irreplaceable information about past care.
- (#3) Reduce duplicate/unnecessary tests.

The remaining choices are presented here in decreasing order of importance:

(#4) have available when traveling; (#5) ensure privacy and security; (#6) keep as reference for family members in their health care; and (#7) save time when changing providers.

**Other** reasons/uses for medical record management (as volunteered by respondents):

- Continuity of care
- Transfer of record to new doctor
- Accuracy of records over time
- Availability of records when needed
- Monitoring the progression of medical problems
- Enabling physicians to review charts before visit
- Listing immunizations and medications
- Knowledge of own health
- Inaccuracies in record information
- Ability to centralize records
- Ensuring that my records are not confused with others, such as someone with a similar name
- Life history of disease

(Notes:

**(\*) Please turn to the end of this report for a detail of rankings for each answer key.**

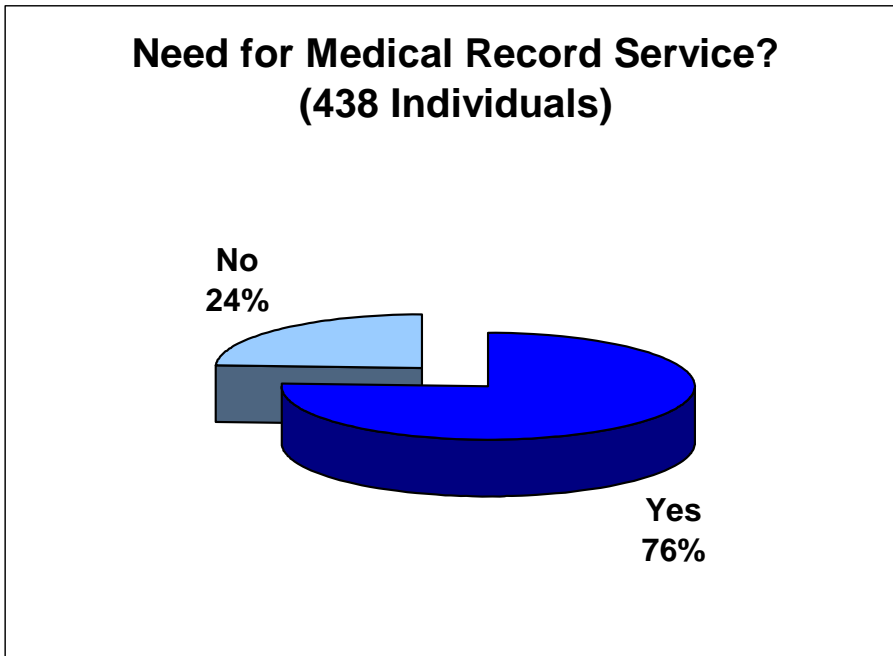
(\*\*) Overall results of ranking were derived from calculating the weighted average of ranked responses (209) per category. Most of the remaining respondents (244) from the population sample (453) did not give unique ranked scores but rather same rankings for more than one answer choice, e.g., multiple "1"s or "2s" etc. We have reviewed results with and without these participants and have found that overall average rankings differ only slightly.)

**Observations**

**Need for Medical Record Service**

17. Do you see a need for a service that helps you to collect, maintain, and make available your medical information to health care providers when needed?

**3 out of 4 (76%)** respondents saw a need for a service that would help them collect and maintain their medical information, and make it available when needed.



Need for Service?			
Answer	Total	% w/ Blank	% w/o Blank
Yes	332	73.3%	75.8%
No	106	23.4%	24.2%
Blank	15	3.3%	
Grand Total	453	100.0%	100.0%

Note: *Blank* refers to the number of survey takers who did not respond to this question.

**Detail Backup For Question 16 (Top Uses of Medical Records)**

**Ranked Scores By Each Medical Record Use**

Unique scores represent answers from 209 respondents who gave a unique score for each usage type with lowest score (1) being the most important and highest score (8) being the least important. Multiple scores represent answers from 244 respondents who gave the same score to more than one usage type. Average score for each usage type is weighted by the distribution of respondents for each ranking. The lower the weighted average score the more important is the usage type, e.g., preventing medical errors received the lowest weighted score of 2.3, and is therefore the most important use to this group of respondents.

<b>Availability When Traveling</b>							
Ranking	Multiple Scoring	Unique Scoring	Total Population	% of Unique Scores	% of Total Population	Weighted Avg of Unique Scores	Weighted Avg of Total Pop
1	119	21	140	10.0%	30.9%	21	140
2	12	17	29	8.1%	6.4%	34	58
3	8	20	28	9.6%	6.2%	60	84
4	10	37	47	17.7%	10.4%	148	188
5	17	32	49	15.3%	10.8%	160	245
6	12	34	46	16.3%	10.2%	204	276
7	7	36	43	17.2%	9.5%	252	301
8	35	9	44	4.3%	9.7%	72	352
No Rank	24	3	27	1.4%	6.0%		
<b>Grand Total</b>	<b>244</b>	<b>209</b>	<b>453</b>	<b>100.0%</b>	<b>100.0%</b>	<b>4.6</b>	<b>3.9</b>

<b>Ensure Privacy and Security</b>							
Ranking	Multiple Scoring	Unique Scoring	Total Population	% of Unique Scores	% of Total Population	Weighted Avg of Unique Scores	Weighted Avg of Total Pop
1	110	24	134	11.5%	29.6%	24	134
2	16	16	32	7.7%	7.1%	32	64
3	11	15	26	7.2%	5.7%	45	78
4	12	26	38	12.4%	8.4%	104	152
5	18	27	45	12.9%	9.9%	135	225
6	7	41	48	19.6%	10.6%	246	288
7	6	40	46	19.1%	10.2%	280	322
8	37	15	52	7.2%	11.5%	120	416
No Rank	27	5	32	2.4%	7.1%		
<b>Grand Total</b>	<b>244</b>	<b>209</b>	<b>453</b>	<b>100.0%</b>	<b>100.0%</b>	<b>4.8</b>	<b>4.0</b>

<b>Avoid Loss of Irreplaceable Info</b>							
Ranking	Multiple Scoring	Unique Scoring	Total Population	% of Unique Scores	% of Total Population	Weighted Avg of Unique Scores	Weighted Avg of Total Pop
1	136	44	180	21.1%	39.7%	44	180
2	15	42	57	20.1%	12.6%	84	114
3	12	48	60	23.0%	13.2%	144	180
4	10	26	36	12.4%	7.9%	104	144
5	3	27	30	12.9%	6.6%	135	150
6	6	10	16	4.8%	3.5%	60	96
7	4	8	12	3.8%	2.6%	56	84
8	32	2	34	1.0%	7.5%	16	272
No Rank	26	2	28	1.0%	6.2%		
<b>Grand Total</b>	<b>244</b>	<b>209</b>	<b>453</b>	<b>100.0%</b>	<b>100.0%</b>	<b>3.1</b>	<b>2.9</b>

## Detail Backup For Question 16 (Top Uses of Medical Records)

### Ranked Scores By Each Medical Record Use

<b>Reduce Duplicate/Unnecessary Tests</b>							
Ranking	Multiple Scoring	Unique Scoring	Total Population	% of Unique Scores	% of Total Population	Weighted Avg of Unique Scores	Weighted Avg of Total Pop
1	129	14	143	6.7%	31.6%	14	143
2	19	59	78	28.2%	17.2%	118	156
3	16	51	67	24.4%	14.8%	153	201
4	13	38	51	18.2%	11.3%	152	204
5	9	24	33	11.5%	7.3%	120	165
6	5	17	22	8.1%	4.9%	102	132
7	3	4	7	1.9%	1.5%	28	49
8	26	1	27	0.5%	6.0%	8	216
No Rank	24	1	25	0.5%	5.5%		
<b>Grand Total</b>	<b>244</b>	<b>209</b>	<b>453</b>	<b>100.0%</b>	<b>100.0%</b>	<b>3.3</b>	<b>3.0</b>

<b>Prevent Avoidable Medical Errors</b>							
Ranking	Multiple Scoring	Unique Scoring	Total Population	% of Unique Scores	% of Total Population	Weighted Avg of Unique Scores	Weighted Avg of Total Pop
1	160	82	242	39.2%	53.4%	82	242
2	13	48	61	23.0%	13.5%	96	122
3	6	41	47	19.6%	10.4%	123	141
4	3	18	21	8.6%	4.6%	72	84
5	4	13	17	6.2%	3.8%	65	85
6	3	5	8	2.4%	1.8%	30	48
7	2	2	4	1.0%	0.9%	14	28
8	29	0	29	0.0%	6.4%	0	232
No Rank	24	0	24	0.0%	5.3%		
<b>Grand Total</b>	<b>244</b>	<b>209</b>	<b>453</b>	<b>100.0%</b>	<b>100.0%</b>	<b>2.3</b>	<b>2.3</b>

<b>Records as Reference for Family</b>							
Ranking	Multiple Scoring	Unique Scoring	Total Population	% of Unique Scores	% of Total Population	Weighted Avg of Unique Scores	Weighted Avg of Total Pop
1	112	13	125	6.2%	27.6%	13	125
2	22	11	33	5.3%	7.3%	22	66
3	16	16	32	7.7%	7.1%	48	96
4	10	32	42	15.3%	9.3%	128	168
5	14	39	53	18.7%	11.7%	195	265
6	7	51	58	24.4%	12.8%	306	348
7	6	37	43	17.7%	9.5%	259	301
8	28	7	35	3.3%	7.7%	56	280
No Rank	29	3	32	1.4%	7.1%		
<b>Grand Total</b>	<b>244</b>	<b>209</b>	<b>453</b>	<b>100.0%</b>	<b>100.0%</b>	<b>5.0</b>	<b>3.9</b>

**Detail Backup For Question 16 (Top Uses of Medical Records)**

**Ranked Scores By Each Medical Record Use**

<b>Save Time</b>							
Ranking	Multiple Scoring	Unique Scoring	Total Population	% of Unique Scores	% of Total Population	Weighted Avg of Unique Scores	Weighted Avg of Total Pop
1	123	8	131	3.8%	28.9%	8	131
2	24	11	35	5.3%	7.7%	22	70
3	12	15	27	7.2%	6.0%	45	81
4	15	26	41	12.4%	9.1%	104	164
5	9	37	46	17.7%	10.2%	185	230
6	5	38	43	18.2%	9.5%	228	258
7	2	64	66	30.6%	14.6%	448	462
8	28	5	33	2.4%	7.3%	40	264
No Rank	26	5	31	2.4%	6.8%		
<b>Grand Total</b>	<b>244</b>	<b>209</b>	<b>453</b>	<b>100.0%</b>	<b>100.0%</b>	<b>5.3</b>	<b>3.9</b>

<b>Other</b>							
Ranking	Multiple Scoring	Unique Scoring	Total Population	% of Unique Scores	% of Total Population	Weighted Avg of Unique Scores	Weighted Avg of Total Pop
1	21	5	26	2.4%	5.7%	5	26
2	2	4	6	1.9%	1.3%	8	12
3	2	0	2	0.0%	0.4%	0	6
4	2	1	3	0.5%	0.7%	4	12
5	3	5	8	2.4%	1.8%	25	40
6	1	2	3	1.0%	0.7%	12	18
7	0	4	4	1.9%	0.9%	28	28
8	8	83	91	39.7%	20.1%	664	728
No Rank	205	105	310	50.2%	68.4%		
<b>Grand Total</b>	<b>244</b>	<b>209</b>	<b>453</b>	<b>100.0%</b>	<b>100.0%</b>	<b>7.2</b>	<b>6.1</b>